

L1 FILE 'REGISTRY' ENTERED AT 10:41:14 ON 22 MAY 2004
L2 1 S 165252-70-0
1 S 283594-90-1

FILE 'CAPLUS, WPIDS, CABA, CROPB, CROPU' ENTERED AT 10:45:57 ON 22 MAY 2004

L3 FILE 'REGISTRY' ENTERED AT 10:46:06 ON 22 MAY 2004
SET SMARTSELECT ON
SEL L1 1- CHEM : 4 TERMS
SET SMARTSELECT OFF

L4 FILE 'CAPLUS, WPIDS, CABA, CROPB, CROPU' ENTERED AT 10:46:07 ON 22 MAY 2004
225 S L3/BI

L5 FILE 'REGISTRY' ENTERED AT 10:46:23 ON 22 MAY 2004
SET SMARTSELECT ON
SEL L2 1- CHEM : 2 TERMS
SET SMARTSELECT OFF

L6 FILE 'CAPLUS, WPIDS, CABA, CROPB, CROPU' ENTERED AT 10:46:23 ON 22 MAY 2004
23 S L5/BI
L7 1 S L4 AND L6 → US 2003/198659 → see L12 answer 3 of 4.

FILE 'USPATFULL' ENTERED AT 10:47:57 ON 22 MAY 2004

L8 FILE 'REGISTRY' ENTERED AT 10:48:04 ON 22 MAY 2004
SET SMARTSELECT ON
SEL L1 1- CHEM : 4 TERMS
SET SMARTSELECT OFF

L9 FILE 'USPATFULL' ENTERED AT 10:48:05 ON 22 MAY 2004
49 S L8/BI

L10 FILE 'REGISTRY' ENTERED AT 10:48:12 ON 22 MAY 2004
SET SMARTSELECT ON
SEL L2 1- CHEM : 2 TERMS
SET SMARTSELECT OFF

L11 FILE 'USPATFULL' ENTERED AT 10:48:12 ON 22 MAY 2004
4 S L10/BI
L12 4 S L9 AND L11

L13 FILE 'CAPLUS, WPIDS, CABA, CROPB, CROPU' ENTERED AT 10:54:40 ON 22 MAY 2004
1 S L6 AND ACETYLCHOLIN?

L12 ANSWER 1 OF 4 USPTFULL on STN

AN 2004:101631 USPTFULL

TI Pest control agent composition and method of using the same

IN Sakata, Kazuyuki, Kawachinagano, JAPAN

Morimoto, Masayuki, Kawachinagano, JAPAN

Kodama, Hiroshi, Hashimoto, JAPAN

Nishimatsu, Tetsuyosi, Kawachinagano, JAPAN

PI US 2004077500 A1 20040422

AI US 2003-475030 A1 20031016 (10)

WO 2002-JP3780 20020416

PRAI JP 2001-118840 20010417

JP 2001-129588 20010426

DT Utility

FS APPLICATION

LREP MANELLI DENISON & SELTER, 2000 M STREET NW SUITE 700, WASHINGTON, DC,
20036-3307

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2973

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0029] acetamiprid, pymetrozine, fenitrothion, acephate, carbaryl, methomyl, cartap, cyhalothrin, ethofenprox, teflubenzuron, flufenoxuron, tebufenozide, fenpyroximate, pyridaben, imidacloprid, buprofezin, BPMC (fenobucarb), malathion, methidathion, fenthion, diazinon, oxydeprofos, vamidothion, ethiophencarb, pirimicarb, permethrin, cypermethrin, bifenthrin, halfenprox, silafluofen, nitenpyram, chlorfluazuron, methoxyfenozide, tebufenpyrad, pyrimidifen, dicofol, propargite, hexythiazox, clofentezine, spinosad, milbemectin, BT (bacillus thuringiensis), indoxacarb, chlorfenapyr, fipronil, etoxazole, acequinocyl, pirimiphos-methyl, acrinathrin, quinomethionate, chlorpyrifos, avermectin, emamectin-benzoate, fenbutatin oxide, terbufos, ethoprophos, cadusafos, fenamiphos, fensulfothion, DSP, dichlofenthion, fosthiazate, oxamyl, isamidofos, fosthietan, isazofos, thionazin, benfuracarb, spiroadiclofen, ethiofencarb, azinphos-methyl, disulfoton, methiocarb, oxydemetonmethyl, parathion, cyfluthrin, beta-cyfluthrin, tebufpyrimfos, **spiromesifen**, endosulfan, amitraz, tralomethrin, acetoprole, ethiprole and the like.

SUMM [0031] ethion, trichlorfon (DEP), metamidophos, dichlorvos (DDVP), mevinphos, monocrotophos, dimethoate, formothion, mecarbam, thiometon, disulfoton, naled (BRP), methylparathion, cyanophos, diamodafos, albendazole, oxibendazole, fenbendazole, oxfendazole, propaphos, sulprofos, prothiofos, profenofos, isophenphos, temephos, phenthoate, dimethylvinphos, chlorfenvinphos, tetrachlorvinphos, phoxim, isoxathion, pyraclofos, chlorpyrifos-methyl, pyridafenthion, phosalone, phosmet, dioxabenzofos, quinalphos, pyrethrins, allethrin, prallethrin, resmethrin, permethrin, tefluthrin, fenpropathrin, alpha-cypermethrin, lambda-cyhalothrin, deltamethrin, fenvalerate, esfenvalerate, flucythrinate, fluvalinate, cycloprothrin, thiodicarb, aldicarb, alanycarb, metolcarb, xylylcarb, propoxur, fenoxycarb, fenothiocarb, bifenazate, carbofuran, carbosulfan, furathiocarb, diafenthion, diflubenzuron, hexaflumuron, novaluron, lufenuron, chlorfluazuron, cyhexatin, Oleic acid sodium salt, Potassium oleate, methoprene, hydroprene, binapacryl, amitraz, chlorobenzilate, brompropylate, tetradifon, bensultap, benzoximate, chromafenozide, endosulfan, diofenolan, tolfenpyrad, triazamate, nicotine-sulfate, thiadiprid, thiamethoxam, clothianidin, **dinotefuran** (MT I-446), fluazinam, pyriproxyfen, hydramethylnon, cyromazine, TPIC (tripropylisocyanurate), thiocyclam, fenazaquin, polynactins, azadirachtin, rotenone, Hydroxy propyl starch, mesulfenfos, phosphocarb, isoamidofos, aldoxycarb, metam-sodium, morantel tartrate, dazomet, levamisol, trichlamide, pyridalyl, 2-[2-(4-cyanophenyl)-1-(3-trifluoromethylphenyl)-ethylidene]-

N-(4-trifluoromethoxyphenyl)hydrazine carboxamide and its E isomer, its Z isomer, and mixtures of E and Z isomers at arbitrary mixing ratios, and the substituted aminoquinazolinone (thion) derivatives or salts thereof disclosed in JP-A-8-325239 and Japanese Patent Application 2000-334700, etc.

L12 ANSWER 2 OF 4 USPATFULL on STN

AN 2004:39344 USPATFULL

TI Dihalopropene compounds, processes for their preparation, compositions comprising them and their use as pesticides

IN Tiebes, Jorg, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Braun, Ralf, Ramberg, GERMANY, FEDERAL REPUBLIC OF
Dickhaut, Joachim, Heidelberg, GERMANY, FEDERAL REPUBLIC OF
Jakobi, Harald, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Lindell, Stephen, Kelkheim-Fischbach, GERMANY, FEDERAL REPUBLIC OF
Salgado, Vincent L., Oberursel, GERMANY, FEDERAL REPUBLIC OF
Wojtech, Eva, Bad Sodent/Ts., GERMANY, FEDERAL REPUBLIC OF
Jans, Daniela, Bad Homburg v.d.H., GERMANY, FEDERAL REPUBLIC OF
Waibel, Jutta Maria, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Hempel, Waltraud, Liederbach, GERMANY, FEDERAL REPUBLIC OF
Wilhelm, Ronald, Hofheim, GERMANY, FEDERAL REPUBLIC OF

PI US 2004029886 A1 20040212

AI US 2002-289398 A1 20021107 (10)

PRAI DE 2001-155385 20011110

DT Utility

FS APPLICATION

LREP BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box 1404, Alexandria, VA, 22313-1404

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3117

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0169] abamectin, ABG-9008, acetamiprid, Anagrapha falcitera, AKD-1022, AKD-3059, ANS-118, Bacillus thuringiensis, Beauveria bassiana, bensultap, bifenazate (D-2341), binapacryl, BJL-932, bromopropylate, BTG-504, BTG-505, buprofezin, camphechlor, cartap, chlorobenzilate, chlorfenapyr, chlorfluazuron, 2-(4-chloro-phenyl)-4,5-diphenylthiophene (UBI-T 930), chlorfentezine, chromafenozide (ANS-118), CG-216, CG-217, CG-234, A-184699, 2-naphthylmethyl cyclopropane-carboxylate (Rol2-0470), cyromazin, diaclofen (thiamethoxam), diafenthiuron, ethyl N-(3,5-dichloro-4-(1,1,2,3,3,3-hexafluoro-1-propyloxy)phenyl)carbamoyl)-2-chlorobenzocarboximidate, DDT, dicofol, diflubenzuron, N-(2,3-dihydro-3-methyl-1,3-thiazol-2-ylidene)-2,4-xylylidine, dinobuton, dinocap, diofenolan, DPX-062, emamectin benzoate (MK-244), endosulfan, ethiprole (sulfethiprole), ethofenprox, etoxazole (YI-5301), fenazaquin, fenoxycarb, fipronil, fluazuron, flumite (flufenazine, SZI-121), flonicamid (IKI-220), 2-fluoro-5-(4-(4-fenoxyphenyl)-4-methyl-1-pentyl)diphenylether (MTI 800), granulosis and nuclear polyhedrosis viruses, fenpyroximate, fenthio carb, flubenzimine, flucycloxuron, flufenoxuron, flufenprox (ICI-A5683), fluproxyfen, gamma-HCH, halfenozide (RH-0345), halofenprox (MTI-732), hexaflumuron (DE.sub.--473), hexythiazox, HOI-9004, hydramethylnon (AC 217300), lufenuron, imidacloprid, indoxacarb (DPX-MP062), kanemite (AKD-2023), M-020, **MTI-446**, ivermectin, M-020, methoxyfenozone (Intrepid, RH-2485), milbemectin, NC-196, neemgard, nitenpyram (TI-304), 2-nitromethyl-4,5-dihydro-6H-thiazine (DS 52618), 2-nitromethyl-3,4-dihydrothiazole (SD 35651), 2-nitromethylene-1,2-thiazinan-3-ylcarbamaldehyde (WL 108477), pyriproxyfen (S-71639), NC-196, NC-1111, NNI-9768, novaluron (MCW-275), OK-9701, OK-9601, OK-9602, propargite, pymethroline, pyridaben, pyridalyl (S-1812), pyrimidifen (SU-8801), RH-0345, RH-2485, RYI-210, S-1283, S-1833, SB7242, SI-8601, silafluofen, silomadine (CG-177), spinosad, SU-9118, spirodiclofen (BAI-2740),

spiromesifen, tebufenozide, tebufenpyrad (MK-239),
teflubenzuron, tetradifon, tetrasul, thiocloprid, thiocyclam, TI-435,
tolfenpyrad (OMI-88), triazamate (RH-7988), triflumuron, verbutin,
vertalec (Mykotal), YI-5301.

L12 ANSWER 3 OF 4 USPATFULL on STN
AN 2003:282318 USPATFULL
TI Fibrous pest control
IN Hoffmann, Michael P., Ithaca, NY, UNITED STATES
Gardner, Jeffrey, Hector, NY, UNITED STATES
Curtis, Paul D., Ithaca, NY, UNITED STATES
PI US 2003198659 A1 20031023
AI US 2002-281088 A1 20021025 (10)
PRAI US 2001-345349P 20011025 (60)
DT Utility
FS APPLICATION
LREP SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A., P.O. BOX 2938, MINNEAPOLIS,
MN, 55402
CLMN Number of Claims: 64
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 3638
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
DETD [0134] Other types of pesticides that can be used in the fibrous
deterrents of the invention include antibiotic insecticides such as
abamectin, allosamidin, doramectin, emamectin, eprinomectin, ivermectin,
milbemectin, selamectin, spinosad, or thuringiensin; arsenical
insecticides such as calcium arsenate, copper acetoarsenite, copper
arsenate, lead arsenate, potassium arsenite, or sodium arsenite;
botanical insecticides such as anabasine, azadirachtin, d-limonene,
nicotine, pyrethrins, cinerin I, cinerin II, jasmolin I, jasmolin II,
pyrethrin I, pyrethrin II, quassia, rotenone, ryania, or sabadilla;
carbamate insecticides such as bendiocarb or carbaryl; benzofuranyl
methylcarbamate insecticides such as benfuracarb, carbofuran,
carbosulfan, decarbofuran or furathiocarb; dimethylcarbamate
insecticides such as dimetan, dimetilan, hyquincarb or pirimicarb; oxime
carbamate insecticides such as alanycarb, aldicarb, aldoxycarb,
butocarboxim, butoxycarboxim, methomyl, nitrilacarb, oxamyl, tazimcarb,
thiocarboxime, thiodicarb or thiofanox; phenyl methylcarbamate
insecticides such as allyxycarb, aminocarb, bufencarb, butacarb,
carbanolate, cloethocarb, dicresyl, dioxacarb, ethiofencarb,
fenethacarb, fenobucarb, isoprocacarb, methiocarb, metolcarb, mexacarbate,
promacyl, promecarb, propoxur, trimethacarb or xylylcarb; dinitrophenol
insecticides such as dinex, dinoprop or dinosam; fluorine insecticides
such as barium hexafluorosilicate, cryolite, sodium fluoride, sodium
hexafluorosilicate or sulfluramid; formamidine insecticides such as
amitraz, chlordimeform, formetanate or formparanate; fumigant
insecticides such as acrylonitrile, carbon disulfide, carbon
tetrachloride, chloroform, chloropicrin, para-dichlorobenzene,
1,2-dichloropropane, ethyl formate, ethylene dibromide, ethylene
dichloride, ethylene oxide, hydrogen cyanide, methyl bromide,
methylchloroform, methylene chloride, naphthalene, phosphine, sulfur
fluoride, or tetrachloroethane; inorganic insecticides such as borax,
calcium polysulfide, mercurous chloride, potassium thiocyanate, or
sodium thiocyanate; insect growth regulators including chitin synthesis
inhibitors such as bistriflufon, buprofezin, chlorfluaazuron, cyromazine,
diflubenzuron, flucycloxuron, flufenoxuron, hexaflumuron, lufenuron,
novaluron, noviflumuron, penfluron, teflubenzuron or triflumuron;
juvenile hormone mimics such as epofenonane, fenoxycarb, hydroprene,
kinoprene, methoprene, pyriproxyfen or triprene; juvenile hormones such
as juvenile hormone I, juvenile hormone II, or juvenile hormone III;
moulting hormone agonists such as chromafenozide, halofenozide,
methoxyfenozide or tebufenozide; moulting hormones such as

.alpha.-ecdysone or ecdysterone; moulting inhibitors such as diofenolan; precocenes such as precocene I, precocene II, or precocene III; unclassified insect growth regulators such as dicyclanil; nereistoxin analogue insecticides such as bensultap, cartap, thiocyclam, or thiosultap; nicotinoid insecticides such as flonicamid; nitroguanidine insecticides such as clothianidin, **dinotefuran** or thiamethoxam; nitromethylene insecticides such as nitenpyram or nithiazine; pyridylmethylamine insecticides such as acetamiprid, imidacloprid, nitenpyram or thiacloprid; organochlorine insecticides such as bromo-DDT, camphechlor, DDT, pp'-DDT, methoxychlor, or pentachlorophenol; cyclodiene insecticides such as aldrin, chlordane, chlordane, chlordane, chlordane, dieldrin, dilor, endosulfan, endrin, heptachlor, isobenzan, isodrin, kelevan, or mirex; organophosphorus or organo phosphate insecticides such as bromfenvinfos, chlorfenvinfos, crotoxyphos, dichlorvos, dicrotophos, dimethylvinphos, fospirate, heptenophos, methocrotophos, mevinphos, monocrotophos, naled, naftalofos, phosphamidon, propaphos, schradan, or tetrachlorvinphos; organothiophosphate insecticides such as dioxabenzofos, fosmethilan, or phenthoate; aliphatic organothiophosphate insecticides such as acethion, amiton, cadusafos, chlorethoxyfos, chlormephos, demephion, demephion-O, demephion-S, demeton, demeton-O, demeton-S, demeton-methyl, demeton-O-methyl, demeton-S-methyl, demeton-S-methylsulphon, disulfoton, ethion, ethoprophos, isothioate, malathion, methacrifos, oxydemeton-methyl, oxydeprofos, oxydisulfoton, phorate, sulfotep, terbufos or thiometon; aliphatic amide organothiophosphate insecticides such as amidithion, cyanthoate, dimethoate, ethoate-methyl, formothion, mecarbam, omethoate, prothoate, sophamide, or vamidothion; oxime organothiophosphate insecticides such as chlorphoxim, phoxim, or phoxim-methyl; heterocyclic organothiophosphate insecticides such as azamethiphos, coumaphos, coumithoate, dioxathion, endothion, menazon, morphothion, phosalone, pyraclofos, pyridaphenthion or quinothion; benzothiopyran organothiophosphate insecticides such as dithicrofos or thicrofos; benzotriazine organothiophosphate insecticides such as azinphos-ethyl or azinphos-methyl; isoindole organothiophosphate insecticides such as dialifos or phosmet; isoxazole organothiophosphate insecticides such as isoxathion or zolaprofos; pyrazolopyrimidine organothiophosphate insecticides such as chlorprazophos or pyrazophos; pyridine organothiophosphate insecticides such as chlorpyrifos or chlorpyrifos-methyl; pyrimidine organothiophosphate insecticides such as butathiofos, diazinon, etrimfos, lirimfos, pirimiphos-ethyl, pirimiphos-methyl, primidophos, pyrimitate or tebupirimfos; quinoxaline organothiophosphate insecticides such as quinalphos or quinalphos-methyl; thiadiazole organothiophosphate insecticides such as athidathion, lythidathion, methidathion or prothidathion; triazole organothiophosphate insecticides such as isazofos or triazophos; phenyl organothiophosphate insecticides such as azothoate, bromophos, bromophos-ethyl, carbophenothion, chlorthiophos, cyanophos, cythioate, dicapthion, dichlofenthion, etaphos, famphur, fenchlorphos, fenitrothion, fensulfothion, fenthion, fenthion-ethyl, heterophos, jodfenphos, mesulfenfos, parathion, parathion-methyl, phenkapton, phosnichlor, profenofos, prothiofos, sulprofos, temephos, trichlormetaphos-3 or trifenofos; phosphonate insecticides such as butonate or trichlorfon; phosphonothioate insecticides such as mecarphon; phenyl ethylphosphonothioate insecticides such as fonofos or trichloronat; phenyl phenylphosphonothioate insecticides such as cyanofenphos or leptophos; phosphoramidate insecticides such as crufomate, fenamiphos, fosthietan, mephosfolan, phosfolan or pirimetaphos; phosphoramidothioate insecticides such as acephate, isofenphos, methamidophos or propetamphos; phosphorodiamide insecticides such as dimefox, mazidox or mipafox; oxadiazine insecticides such as indoxacarb; pyrazole insecticides such as acetoprole, ethiprole, fipronil, tebufenpyrad, tolfenpyrad or vaniliprole; pyrethroid insecticides including pyrethroid ester insecticides such as acrinathrin, allethrin, bioallethrin, barthrin, bifenthrin, bioethanomethrin, cyclothrin, cycloprothrin,

cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, beta-cypermethrin, theta-cypermethrin, zeta-cypermethrin, cyphenothrin, deltamethrin, dimethrin, empenethrin, fenfluthrin, fenpirithrin, fenpropathrin, fenvalerate, esfenvalerate, flucythrinate, fluvalinate, tau-fluvalinate, furethrin, imiprothrin, metofluthrin, permethrin, biopermethrin, transpermethrin, phenothrin, prallethrin, profluthrin, pyresmethrin, resmethrin, bioresmethrin, cismethrin, tefluthrin, terallethrin, tetramethrin, tralomethrin or transfluthrin; pyrethroid ether insecticides such as etofenprox, flufenprox, halfenprox, protrifenbute or silafluofen; pyrimidinamine insecticides such as flufenimer or pyrimidifen; tetrionic acid insecticides such as **spiromesifen**; or other unclassified insecticides such as chlorfenapyr, closantel, crotamiton, diafenthiuron, fenazaflor, fenoxacrim, flucofuron, hydramethylnon, isoprothiolane, malonoben, metoxadiazone, nifluridide, pyridaben, pyridalyl, raxoxanide, sulcofuron, triarathene or triazamate. These types of compounds are further described at the website at hclrss.demon.co.uk/class_pesticides.html.

CLM What is claimed is:

15. The composition of claim 14 wherein the insecticide is abamectin, allosamidin, doramectin, emamectin, eprinomectin, ivermectin, milbemectin, selamectin, spinosad, thuringiensin, calcium arsenate, copper acetoarsenite, copper arsenate, lead arsenate, potassium arsenite, or sodium arsenite; botanical insecticides such as anabasine, azadirachtin, d-limonene, nicotine, pyrethrins, cinerin I, cinerin II, jasmolin I, jasmolin II, pyrethrin I, pyrethrin II, quassia, rotenone, ryania, sabadilla, bendiocarb, carbaryl, benfuracarb, carbofuran, carbosulfan, decarbofuran, furathiocarb, dimetan, dimetilan, hyquincarb, pirimicarb, alanycarb, aldicarb, aldoxycarb, butocarboxim, butoxycarboxim, methomyl, nitrilacarb, oxamyl, tazimcarb, thiocarboxime, thiodicarb, thiofanox, allyxycarb, aminocarb, bufencarb, butacarb, carbanolate, cloethocarb, dicresyl, dioxacarb, ethiofencarb, fenethacarb, fenobucarb, isoprocab, methiocarb, metolcarb, mexacarbate, promacyl, promecarb, propoxur, trimethacarb, xylylcarb, dinex, dinoprop, dinosam, barium hexafluorosilicate, cryolite, sodium fluoride, sodium hexafluorosilicate, sulfluramid, amitraz, chlordimeform, formetanate, formparanate, acrylonitrile, carbon disulfide, carbon tetrachloride, chloroform, chloropicrin, para-dichlorobenzene, 1,2-dichloropropane, ethyl formate, ethylene dibromide, ethylene dichloride, ethylene oxide, hydrogen cyanide, methyl bromide, methylchloroform, methylene chloride, naphthalene, phosphine, sulfuryl fluoride, tetrachloroethane, borax, calcium polysulfide, mercurous chloride, potassium thiocyanate, sodium thiocyanate, bistrifluron, buprofezin, chlorfluazuron, cyromazine, diflubenzuron, flucycloxuron, flufenoxuron, hexaflumuron, lufenuron, novaluron, noviflumuron, penfluron, teflubenzuron, triflumuron, epofenonane, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, triprene, juvenile hormone I, juvenile hormone II, juvenile hormone III, chromafenozide, halofenozide, methoxyfenozide, tebufenozide, .alpha.-ecdysone, ecdysterone, diofenolan, precocene I, precocene II, precocene III, dicyclanil, bensultap, cartap, thiocyclam, thiosultap, flonicamid, clothianidin, **dinotefuran**, thiamethoxam, nitenpyram, nithiazine, acetamiprid, imidacloprid, nitenpyram, thiacloprid, bromo-DDT, camphechlor, DDT, pp'-DDT, methoxychlor, pentachlorophenol, aldrin, chlorbicyclen, chlordane, chlordecone, dieldrin, dilor, endosulfan, endrin, heptachlor, isobenzan, isodrin, kelevan, mirex, bromfenvinfos, chlorfenvinphos, crotoxyphos, dichlorvos, dicrotophos, dimethylvinphos, fospirate, heptenophos, methocrotophos, mevinphos, monocrotophos, naled, naftalofos, phosphamidon, propaphos, schradan, tetrachlorvinphos, dioxabenzofos, fosmethilan, phenthoate, acethion, amiton, cadusafos, chlorethoxyfos, chlormephos, demephion, demephion-O, demephion-S, demeton, demeton-O, demeton-S, demeton-methyl, demeton-O-methyl, demeton-S-methyl, demeton-S-methylsulphon, disulfoton, ethion, ethoprophos, isothioate, malathion, methacrifos, oxydemeton-methyl, oxydeprofos, oxydisulfoton,

phorate, sulfotep, terbufos, thiometon, amidithion, cyanthoate, dimethoate, ethoate-methyl, formothion, mecarbam, omethoate, prothoate, sophamide, vamidothion, chlorphoxim, phoxim, phoxim-methyl, azamethiphos, coumaphos, coumithoate, dioxathion, endothion, menazon, morphothion, phosalone, pyraclofos, pyridaphenthion, quinothion, dithicrofos, thicrofos, azinphos-ethyl, azinphos-methyl, dialifos, phosmet, isoxazole, isoxathion, zolaprofos, chlorprazophos, pyrazophos, chlorpyrifos, chlorpyrifos-methyl, butathiofos, diazinon, etrimfos, lirimfos, pirimiphos-ethyl, pirimiphos-methyl, primidophos, pyrimitate, tebupirimfos, quinalphos, quinalphos-methyl, athidathion, lythidathion, methidathion, prothidathion, isazofos, triazophos, azothoate, bromophos, bromophos-ethyl, carbophenothion, chlorthiophos, cyanophos, cythioate, dicapthon, dichlofenthion, etaphos, famphur, fenchlorphos, fenitrothion, fensulfothion, fenthion, fenthion-ethyl, heterophos, jodfenphos, mesulfenfos, parathion, parathion-methyl, phenkapton, phosnichlor, profenofos, prothiofos, sulprofos, temephos, trichlormetaphos-3, trifenofos, butonate, trichlorfon, mecarphon, fonofos, trichloronat, cyanofenphos, leptophos, crufomate, fenamiphos, fosthietan, mephosfolan, phosfolan pirimetaphos, acephate, isofenphos, methamidophos, propetamphos, dimefox, mazidox, mipafox, indoxacarb, acetoprole, ethiprole, fipronil, tebufenpyrad, tolfenpyrad, vaniliprole, acrinathrin, allethrin, bioallethrin, barthrin, bifenthrin, bioethanomethrin, cyclothrin, cycloprothrin, cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, beta-cypermethrin, theta-cypermethrin, zeta-cypermethrin, cyphenothrin, deltamethrin, dimethrin, empenthrin, fenfluthrin, fenpirithrin, fenpropathrin, fenvalerate, esfenvalerate, flucythrinate, fluvalinate, tau-fluvalinate, furethrin, imiprothrin, metofluthrin, permethrin, biopermethrin, transpermethrin, phenothrin, prallethrin, profluthrin, pyresmethrin, resmethrin, bioresmethrin, cismethrin, tefluthrin, terallethrin, tetramethrin, tralomethrin, transfluthrin, etofenprox, flufenprox, halfenprox, protrifenbute, silafluofen, flufenerim, pyrimidifen, **spiromesifen**, chlorfenapyr, closantel, crotamiton, diafenthion, fenazaflor, fenoxacrim, flucifuron, hydramethylnon, isoprothiolane, malonoben, metoxadiazone, nifluridide, pyridaben, pyridalyl, rafxanide, sulcofuron, triarathene or triazamate.

44. The method of claim 43 wherein the insecticide is abamectin, allosamidin, doramectin, emamectin, eprinomectin, ivermectin, milbemectin, selamectin, spinosad, thuringiensin, calcium arsenate, copper acetoarsenite, copper arsenate, lead arsenate, potassium arsenite, or sodium arsenite; botanical insecticides such as anabasine, azadirachtin, d-limonene, nicotine, pyrethrins, cinerin T, cinerin II, jasmolin I, jasmolin II, pyrethrin I, pyrethrin II, quassia, rotenone, ryania, sabadilla, bendiocarb, carbaryl, benfuracarb, carbofuran, carbosulfan, decarbofuran, furathiocarb, dimetan, dimetilan, hyquincarb, pirimicarb, alanycarb, aldicarb, aldoxycarb, butocarboxim, butoxycarboxim, methomyl, nitrilacarb, oxamyl, tazimcarb, thiocarboxime, thiodicarb, thiofanox, allyxycarb, aminocarb, bufencarb, butacarb, carbanolate, cloethocarb, dicresyl, dioxacarb, ethiofencarb, fenethacarb, fenobucarb, isoprocacarb, methiocarb, metolcarb, mexacarbate, promacyl, promecarb, propoxur, trimethacarb, xylylcarb, dinex, dinoprop, dinosam, barium hexafluorosilicate, cryolite, sodium fluoride, sodium hexafluorosilicate, sulfluramid, amitraz, chlordimeform, formetanate, formparanate, acrylonitrile, carbon disulfide, carbon tetrachloride, chloroform, chloropicrin, para-dichlorobenzene, 1,2-dichloropropane, ethyl formate, ethylene dibromide, ethylene dichloride, ethylene oxide, hydrogen cyanide, methyl bromide, methylchloroform, methylene chloride, naphthalene, phosphine, sulfuryl fluoride, tetrachloroethane, borax, calcium polysulfide, mercurous chloride, potassium thiocyanate, sodium thiocyanate, bistrifluron, buprofezin, chlorfluazuron, cyromazine, diflubenzuron, flucycloxuron, flufenoxuron, hexaflumuron, lufenuron, novaluron, noviflumuron, penfluron, teflubenzuron, triflumuron,

epofenonane, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, triprene, juvenile hormone I, juvenile hormone II, juvenile hormone III, chromafenozide, halofenozide, methoxyfenozide, tebufenozide, .alpha.-ecdysone, ecdysterone, diofenolan, precocene I, precocene II, precocene III, dicyclanil, bensultap, cartap, thiocyclam, thiosultap, flonicamid, clothianidin, **dinotefuran**, thiamrethoxam, nitenpyram, nithiazine, acetamiprid, imidacloprid, nitenpyram, thiacloprid, bromo-DDT, camphechlor, DDT, pp'-DDT, methoxychlor, pentachlorophenol, aldrin, chlorbicyclen, chlordane, chlordecone, dieldrin, dilor, endosulfan, endrin, heptachlor, isobenzan, isodrin, kelevan, mirex, bromfenvinphos, chlorfenvinphos, crotoxyphos, dichlorvos, dicrotophos, dimethylvinphos, fospirate, heptenophos, methocrotophos, mevinphos, monocrotophos, naled, naftalofos, phosphamidon, propaphos, schradan, tetrachlorvinphos, dioxabenzofos, fosmethilan, phenthoate, acethion, amiton, cadusafos, chlorethoxyfos, chlormephos, demephion, demephion-O, demephion-S, demeton, demeton-O, demeton-S, demeton-methyl, demeton-O-methyl, demeton-S-methyl, demeton-S-methylsulphon, disulfoton, ethion, ethoprophos, isothioate, malathion, methacrifos, oxydemeton-methyl, oxydeprofos, oxydisulfoton, phorate, sulfotep, terbufos, thiometon, amidithion, cyanthoate, dimethoate, ethoate-methyl, formothion, mecarbam, omethoate, prothoate, sophamide, vamidothion, chlorphoxim, phoxim, phoxim-methyl, azamethiphos, coumaphos, coumithoate, dioxathion, endothion, menazon, morphothion, phosalone, pyraclofos, pyridaphenthion, quinothion, dithicrofos, thicrofos, azinphos-ethyl, azinphos-methyl, dialifos, phosmet, isoxazole, isoxathion, zolaprofos, chlorprazophos, pyrazophos, chlorpyrifos, chlorpyrifos-methyl, butathiofos, diazinon, etrimfos, lirimfos, pirimiphos-ethyl, pirimiphos-methyl, primidophos, pyrimitate, tebupirimfos, quinalphos, quinalphos-methyl, athidathion, lythidathion, methidathion, prothidathion, isazofos, triazophos, azothoate, bromophos, bromophos-ethyl, carbophenothion, chlorthiophos, cyanophos, cythioate, dicapthon, dichlofenthion, etaphos, famphur, fenchlorphos, fenitrothion, fensulfothion, fenthion, fenthion-ethyl, heterophos, jodfenphos, mesulfenfos, parathion, parathion-methyl, phenkapton, phosnichlor, profenofos, prothiofos, sulprofos, temefos, trichlormetaphos-3, trifenofos, butonate, trichlorfon, mecarphon, fonofos, trichloronat, cyanofenphos, leptophos, cruformate, fenamiphos, fosthietan, mephosfolan, phosfolan pirimetaphos, acephate, isofenphos, methamidophos, propetamphos, dimefox, mazidox, mipafox, indoxacarb, acetoprole, ethiprole, fipronil, tebufenpyrad, tolfenpyrad, vaniliprole, acrinathrin, allethrin, bioallethrin, barthrin, bifenthrin, bioethanomethrin, cyclothrin, cycloprothrin, cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, beta-cypermethrin, theta-cypermethrin, zeta-cypermethrin, cyphenothrin, deltamethrin, dimethrin, empenthrin, fenfluthrin, fenpirithrin, fenpropathrin, fenvalerate, esfenvalerate, flucythrinate, fluvalinate, tau-fluvalinate, furethrin, imiprothrin, metofluthrin, permethrin, biopermethrin, transpermethrin, phenothrin, prallethrin, profluthrin, pyresmethrin, resmethrin, bioresmethrin, cismethrin, tefluthrin, terallethrin, tetramethrin, tralomethrin, transfluthrin, etofenprox, flufenprox, halfenprox, protrifenbute, silafluofen, flufenerim, pyrimidifen, **spiromesifen**, chlorfenapyr, closantel, crotamiton, diafenthiuron, fenazaflor, fenoxacrim, flucofuron, hydramethylnon, isoprothiolane, malonoben, metoxadiazone, nifluridide, pyridaben, pyridalyl, rafoxanide, sulcofuron, triarathene or triazamate.

59. The method of claim 58 wherein the insecticide is abamectin, allosamidin, doramectin, emamectin, eprinomectin, ivermectin, milbemectin, selamectin, spinosad, thuringiensin, calcium arsenate, copper acetoarsenite, copper arsenate, lead arsenate, potassium arsenite, or sodium arsenite; botanical insecticides such as anabasine, azadirachtin, d-limonene, nicotine, pyrethrins, cinerin I, cinerin II, jasmolin I, jasmolin II, pyrethrin I, pyrethrin II, quassia, rotenone,

ryania, sabadilla, bendiocarb, carbaryl, benfuracarb, carbofuran, carbosulfan, decarbofuran, furathiocarb, dimetan, dimetilan, hyquincarb, pirimicarb, alanycarb, aldicarb, aldoxycarb, butocarboxim, butoxycarboxim, methomyl, nitrilacarb, oxamyl, tazimcarb, thiocarboxime, thiodicarb, thiofanox, allyxycarb, aminocarb, bufencarb, butacarb, carbanolate, cloethocarb, dicresyl, dioxacarb, ethiofencarb, fenethacarb, fenobucarb, isoprocarb, methiocarb, metolcarb, mexacarbate, promacyl, promecarb, propoxur, trimethacarb, xylylcarb, dinex, dinoprop, dinosam, barium hexafluorosilicate, cryolite, sodium fluoride, sodium hexafluorosilicate, sulfluramid, amitraz, chlordimeform, formetanate, formparanate, acrylonitrile, carbon disulfide, carbon tetrachloride, chloroform, chloropicrin, para-dichlorobenzene, 1,2-dichloropropane, ethyl formate, ethylene dibromide, ethylene dichloride, ethylene oxide, hydrogen cyanide, methyl bromide, methylchloroform, methylene chloride, naphthalene, phosphine, sulfuryl fluoride, tetrachloroethane, borax, calcium polysulfide, mercurous chloride, potassium thiocyanate, sodium thiocyanate, bistrifluron, buprofezin, chlorfluazuron, cyromazine, diflubenzuron, flucycloxuron, flufenoxuron, hexaflumuron, lufenuron, novaluron, noviflumuron, penfluron, teflubenzuron, triflumuron, epofenonane, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, triprene, juvenile hormone I, juvenile hormone II, juvenile hormone III, chromafenozide, halofenozide, methoxyfenozide, tebufenozide, .alpha.-ecdysone, ecdysterone, diofenolan, precocene I, precocene II, precocene III, dicyclanil, bensultap, cartap, thiocyclam, thiosultap, flonicamid, clothianidin, **dinotefuran**, thiamethoxam, nitenpyram, nithiazine, acetamiprid, imidacloprid, nitenpyram, thiachloprid, bromo-DDT, camphechlor, DDT, pp'-DDT, methoxychlor, pentachlorophenol, aldrin, chlorbicyclen, chlordane, chlordecone, dieldrin, dilor, endosulfan, endrin, heptachlor, isobenzan, isodrin, kelevan, mirex, bromfenvinfos, chlorfenvinphos, crotoxyphos, dichlorvos, dicrotophos, dimethylvinphos, fospirate, heptenophos, methocrotophos, mevinphos, monocrotophos, naled, naftalofos, phosphamidon, propaphos, schradan, tetrachlorvinphos, dioxabenzofos, fosmethilan, phenthoate, acethion, amiton, cadusafos, chlorethoxyfos, chlormephos, demephion, demephion-O, demephion-S, demeton, demeton-O, demeton-S, demeton-methyl, demeton-O-methyl, demeton-S-methyl, demeton-S-methylsulphon, disulfoton, ethion, ethoprophos, isothioate, malathion, methacrifos, oxydemeton-methyl, oxydeprofos, oxydisulfoton, phorate, sulfotep, terbufos, thiometon, amidithion, cyanthoate, dimethoate, ethoate-methyl, formothion, mecarbam, omethoate, prothoate, sophamide, vamidothion, chlorphoxim, phoxim, phoxim-methyl, azamethiphos, coumaphos, coumethoate, dioxathion, endothion, menazon, morphothion, phosalone, pyraclofos, pyridaphenthion, quinothion, dithicrofos, thicrofos, azinphos-ethyl, azinphos-methyl, dialifos, phosmet, isoxazole, isoxathion, zolaprofos, chlorprazophos, pyrazophos, chlorpyrifos, chlorpyrifos-methyl, butathiofos, diazinon, etrimfos, lirimfos, pirimiphos-ethyl, pirimiphos-methyl, primidophos, pyrimitate, tebupirimfos, quinalphos, quinalphos-methyl, athidathion, lythidathion, methidathion, prothidathion, isazofos, triazophos, azothoate, bromophos, bromophos-ethyl, carbophenothion, chlorthiophos, cyanophos, cythioate, dicapthon, dichlofenthion, etaphos, famphur, fenchlorphos, fenitrothion, fensulfothion, fenthion, fenthion-ethyl, heterophos, jodfenphos, mesulfenfos, parathion, parathion-methyl, phenkapton, phosnichlor, profenofos, prothiofos, sulprofos, temephos, trichlormetaphos-3, trifenofos, butonate, trichlorfon, mecarphon, fonofos, trichloronat, cyanofenphos, leptophos, crufomate, fenamiphos, fosthietan, mephosfolan, phosfolan pirimetaphos, acephate, isofenphos, methamidophos, propetamphos, dimefox, mazidox, mipafox, indoxacarb, acetoprole, ethiprole, fipronil, tebufenpyrad, tolfenpyrad, vaniliprole, acrinathrin, allethrin, bioallethrin, barthrin, bifenthrin, bioethanomethrin, cyclothrin, cycloprothrin, cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, beta-cypermethrin, theta-cypermethrin, zeta-cypermethrin, cyphenothrin, deltamethrin, dimethrin, empenthrin,

fenfluthrin, fenpirithrin, fenpropathrin, fenvalerate, esfenvalerate, flucythrinate, fluvalinate, tau-fluvalinate, furethrin, imiprothrin, metofluthrin, permethrin, biopermethrin, transpermethrin, phenothrin, prallethrin, profluthrin, pyresmethrin, resmethrin, bioresmethrin, cismethrin, tefluthrin, terallethrin, tetramethrin, tralomethrin, transfluthrin, etofenprox, flufenprox, halfenprox, protrifenbute, silafluofen, flufenerim, pyrimidifen, **spiromesifen**, chlorfenapyr, closantel, crotamiton, diafenthiuron, fenazaflor, fenoxacrim, flucofuron, hydramethylnon, isoprothiolane, malonoben, metoxadiazone, nifluridide, pyridaben, pyridalyl, rafoxanide, sulcofuron, triarathene or triazamate.

L12 ANSWER 4 OF 4 USPATFULL on STN

AN 2003:158972 USPATFULL

TI Polymer conjugates of insecticidal peptides or nucleic acids or insecticides and methods of use thereof

IN Roe, R. Michael, Middlesex, NC, UNITED STATES

Brandt, Alan E., Chapel Hill, NC, UNITED STATES

PI US 2003108585 A1 20030612

AI US 2002-285398 A1 20021031 (10)

RLI Continuation-in-part of Ser. No. US 2002-139105, filed on 3 May 2002, PENDING

PRAI US 2001-288714P 20010504 (60)

DT Utility

FS APPLICATION

LREP MYERS BIGEL SIBLEY & SAJOVEC, PO BOX 37428, RALEIGH, NC, 27627

CLMN Number of Claims: 66

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1255

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD [0104] The foregoing is illustrative of the present invention, and is not to be construed as limiting thereof. The invention is defined by the following claims, with equivalents of the claims to be included therein.

TABLE I

- I. Nereistoxin analogue insecticides
 - A. bensultap
 - B. cartap
 - C. thiocyclam
 - D. thiosultap
- II. Antibiotic insecticides
 - A. abamectin
 - B. allosamidin
 - C. doramectin
 - D. emamectin
 - E. eprinomectin
 - F. ivermectin
 - G. milbemectin
 - H. selamectin
 - I. spinosad
 - J. thuringiensin
- III. Arsenical insecticides
 - A. calcium arsenate
 - B. copper acetoarsenite
 - C. copper arsenate
 - D. lead arsenate
 - E. potassium arsenite
 - F. sodium arsenite
- IV. Nicotinoid insecticides
 - A. flonicamid
 - B. nitroguanidine insecticides

- 1. clothianidin
 - 1. **dinotefuran**
 - 2. thiamethoxam
- C. nitromethylene insecticides
 - 1. nitenpyram
 - 2. nithiazine
- D. pyridylmethylaniline insecticides
 - 1. acetamiprid
 - 2. imidacloprid
 - 3. nitenpyram
 - 4. thiacloprid
- V. Botanical insecticides
 - A. anabasine
 - B. azadirachtin
 - C. d-limonene
 - D. nicotine
 - E. pyrethrins
 - 1. cinerin I
 - 2. cinerin II
 - 3. jasmolin I
 - 4. jasmolin II
 - 5. pyrethrin I
 - 6. pyrethrin II
 - F. quassia
 - G. rotenone
 - H. ryania
 - I. sabadilla
- VI. Organochlorine insecticides
 - A. bromo-DDT
 - B. camphechlor
 - C. DDT
 - 1. pp'-DDT
 - D. ethyl-DDD
 - E. HCH
 - 1. gamma-HCH
 - 2. lindane
 - F. methoxychlor
 - G. pentachlorophenol
 - H. TDE
 - I. cyclodiene insecticides
 - 1. aldrin
 - 2. chlordane
 - 3. chlordane
 - 4. chlordane
 - 5. dieldrin
 - 6. dieldrin
 - 7. endosulfan
 - 8. endrin
 - 9. HEOD
 - 10. heptachlor
 - 11. HHDN
 - 12. isobenzan
 - 13. isodrin
 - 14. kelevan
 - 15. mirex
- VII. Carbamate insecticides
 - A. bendiocarb
 - B. carbaryl
 - C. benzofuranyl methylcarbamate insecticides
 - 1. benfuracarb
 - 2. carbofuran
 - 3. carbosulfan
 - 4. decarbofuran
 - 5. furathiocarb

- D. dimethylcarbamate insecticides
 - 1. dimetan
 - 2. dimetilan
 - 3. hyquincarb
 - 4. pirimicarb
- E. oxime carbamate insecticides
 - 1. alanycarb
 - 2. aldicarb
 - 3. aldoxycarb
 - 4. butocarboxim
 - 5. butoxycarboxim
 - 6. methomyl
 - 7. nitrilacarb
 - 8. oxamyl
 - 9. tazimcarb
 - 10. thiocarboxime
 - 11. thiodicarb
 - 12. thiofanox
- F. phenyl methylcarbamate insecticides
 - 1. allyxycarb
 - 2. aminocarb
 - 3. bufencarb
 - 4. butacarb
 - 5. carbanolate
 - 6. cloethocarb
 - 7. dicresyl
 - 8. dioxacarb
 - 9. EMPC
 - 10. ethiofencarb
 - 11. fenethacarb
 - 12. fenobucarb
 - 13. isoprocarb
 - 14. methiocarb
 - 15. metolcarb
 - 16. mexacarbate
 - 17. promacyl
 - 18. promecarb
 - 19. propoxur
 - 20. trimethacarb
 - 21. XMC
 - 22. xylylcarb

VIII.

Organophosphorus insecticides

- A. organophosphate insecticides
 - 1. bromfenvinfos
 - 2. chlorfenvinphos
 - 3. crotoxyphos
 - 4. dichlorvos
 - 5. dicrotophos
 - 6. dimethylvinphos
 - 7. fospirate
 - 8. heptenophos
 - 9. methocrotophos
 - 10. mevinphos
 - 11. monocrotophos
 - 12. naled
 - 13. naftalofos
 - 14. phosphamidon
 - 15. propaphos
 - 16. schradan
 - 17. TEPP
 - 18. tetrachlorvinphos
- B. organothiophosphate insecticides
 - 1. dioxabenzofos
 - 2. fosmethilan

- 3. phenthoate
- C. aliphatic organothiophosphate insecticides
 - 1. acethion
 - 2. amiton
 - 3. cadusafos
 - 4. chlorethoxyfos
 - 5. chlormephos
 - 6. demephion
 - a. demephion-O
 - b. demephion-S
 - 7. demeton
 - a. demeton-O
 - b. demeton-S
 - 8. demeton-methyl
 - a. demeton-O-methyl
 - b. demeton-S-methyl
 - 9. demeton-S-methylsulphon
 - 10. disulfoton
 - 11. ethion
 - 12. ethoprophos
 - 13. IPSP
 - 14. isothioate
 - 15. malathion
 - 16. methacrifos
 - 17. oxydemeton-methyl
 - 18. oxydeprofos
 - 19. oxydisulfoton
 - 20. phorate
 - 21. sulfotep
 - 22. terbufos
 - 23. thiometon
- D. aliphatic amide organothiophosphate insecticides
 - 1. amidithion
 - 2. cyanthoate
 - 3. dimethoate
 - 4. ethoate-methyl
 - 5. formothion
 - 6. mecarbam
 - 7. omethoate
 - 8. prothoate
 - 9. sophamide
 - 10. vamidothion
- E. oxime organothiophosphate insecticides
 - 1. chlorphoxim
 - 2. phoxim
 - 3. phoxim-methyl
- F. heterocyclic organothiophosphate insecticides
 - 1. azamethiphos
 - 2. coumaphos
 - 3. coumithoate
 - 4. dioxathion
 - 5. endothion
 - 6. menazon
 - 7. morphothion
 - 8. phosalone
 - 9. pyraclofos
 - 10. pyridaphenthion
 - 11. quinothion
- G. benzothiofuran organothiophosphate insecticides
 - 1. dithicrofos
 - 2. thicrofos
- H. benzotriazine organothiophosphate insecticides
 - 1. azinphos-ethyl
 - 2. azinphos-methyl

- I. isoindole organothiophosphate insecticides
 - 1. dialifos
 - 2. phosmet
- J. isoxazole organothiophosphate insecticides
 - 1. isoxathion
 - 2. zolaprofos
- K. pyrazolopyrimidine organothiophosphate insecticides
 - 1. chlorprazophos
 - 2. pyrazophos
- L. pyridine organothiophosphate insecticides
 - 1. chlorpyrifos
 - 2. chlorpyrifos-methyl
- M. pyrimidine organothiophosphate insecticides
 - 1. butathiofos
 - 2. diazinon
 - 3. etrimfos
 - 4. lirimfos
 - 5. pirimiphos-ethyl
 - 6. pirimiphos-methyl
 - 7. primidophos
 - 8. pyrimitate
 - 9. tebupirimfos
- N. quinoxaline organothiophosphate insecticides
 - 1. quinalphos
 - 2. quinalphos-methyl
- O. thiadiazole organothiophosphate insecticides
 - 1. athidathion
 - 2. lythidathion
 - 3. methidathion
 - 4. prothidathion
- P. triazole organothiophosphate insecticides
 - 1. isazofos
 - 2. triazophos
- Q. phenyl organothiophosphate insecticides
 - 1. azothoate
 - 2. bromophos
 - 3. bromophos-ethyl
 - 4. carbophenothion
 - 5. chlorthiophos
 - 6. cyanophos
 - 7. cythioate
 - 8. dicapthon
 - 9. dichlofenthion
 - 10. etaphos
 - 11. famphur
 - 12. fenchlorphos
 - 13. fenitrothion
 - 14. fensulfothion
 - 15. fenthion
 - 16. fenthion-ethyl
 - 17. heterophos
 - 18. jodfenphos
 - 19. mesulfenfos
 - 20. parathion
 - 21. parathion-methyl
 - 22. phenkapton
 - 23. phosnichlor
 - 24. profenofos
 - 25. prothiofos
 - 26. sulprofos
 - 27. temephos
 - 28. trichlormetaphos-3
 - 29. trifenofos
- R. phosphonate insecticides

1. butonate
2. trichlorfon
- S. phosphonothioate insecticides
 1. mecarphon
- T. phenyl ethylphosphonothioate insecticides
 2. fonofos
 3. trichloronat
- U. phenyl phenylphosphonothioate insecticides
 1. cyanofenphos
 2. EPN
 3. leptophos
- V. phosphoramidate insecticides
 1. crufomate
 2. fenamiphos
 3. fosthietan
 4. mephosfolan
 5. phosfolan
 6. pirimetaphos
- W. phosphoramidothioate insecticides
 1. acephate
 2. isofenphos
 3. methamidophos
 4. propetamphos
- X. phosphorodiamide insecticides
 1. dimefox
 2. mazidox
 3. mipafox
- IX. Dinitrophenol insecticides
 - A. dinex
 - B. dinoprop
 - C. dinosam
 - D. DNOC
- X. Oxadiazine insecticides
 - A. indoxacarb
- XI. Fluorine insecticides
 - A. barium hexafluorosilicate
 - B. cryolite
 - C. sodium fluoride
 - D. sodium hexafluorosilicate
 - E. sulfluramid
- XII. Pyrazole insecticides
 - A. acetoprole
 - B. ethiprole
 - C. fipronil
 - D. tebufenpyrad
 - E. tolfenpyrad
 - F. vaniliprole
- XIII. Formamidine insecticides
 - A. amitraz
 - B. chlordimeform
 - C. formetanate
 - D. formparanate
- XIV. Pyrethroid insecticides
 - A. pyrethroid ester insecticides
 1. acrinathrin
 2. allethrin
 3. bioallethrin
 4. barthrin
 5. bifenthrin
 6. bioethanomethrin
 7. cyclethrin
 8. cycloprothrin
 9. cyfluthrin
 10. beta-cyfluthrin

11. cyhalothrin
12. gamma-cyhalothrin
13. lambda-cyhalothrin
14. cypermethrin
15. alpha-cypermethrin
16. beta-cypermethrin
17. theta-cypermethrin
18. zeta-cypermethrin
19. cyphenothrin
20. deltamethrin
21. dimethrin
22. empenthrin
23. fenfluthrin
24. fenpirithrin
25. fenpropathrin
26. fenvalerate
27. esfenvalerate
28. flucythrinate
29. fluvalinate
30. tau-fluvalinate
31. furethrin
32. imiprothrin
33. permethrin
34. biopermethrin
35. transpermethrin
36. phenothrin
37. prallethrin
38. pyresmethrin
39. resmethrin
40. bioresmethrin
41. cismethrin
42. tefluthrin
43. terallethrin
44. tetramethrin
45. tralomethrin
46. transfluthrin

B. pyrethroid ether insecticides

1. etofenprox
2. flufenprox
3. halfenprox
4. protrifenbute
5. silafluofen

XV.

Fumigant insecticides

- A. acrylonitrile
- B. carbon disulfide
- C. carbon tetrachloride
- D. chloroform
- E. chloropicrin
- F. para-dichlorobenzene
- G. 1,2-dichloropropane
- H. ethyl formate
- I. ethylene dibromide
- J. ethylene dichloride
- K. ethylene oxide
- L. hydrogen cyanide
- M. methyl bromide
- N. methylchloroform
- O. methylene chloride
- P. naphthalene
- Q. phosphine
- R. sulfuryl fluoride
- S. tetrachloroethane

XVI.

Pyrimidinamine insecticides

1. flufenerim

- 2. pyrimidifen
- XVII. Inorganic insecticides
 - A. borax
 - B. calcium polysulfide
 - C. mercurous chloride
 - D. potassium thiocyanate
 - E. sodium thiocyanate
- XVIII. Tetronic acid insecticides
 - A. **spiromesifen**
- XIX. Insect growth regulators
 - A. chitin synthesis inhibitors
 - 1. bistrifluron
 - 2. buprofezin
 - 3. chlorfluazuron
 - 4. cyromazine
 - 5. diflubenzuron
 - 6. flucycloxuron
 - 7. flufenoxuron
 - 8. hexaflumuron
 - 9. lufenuron
 - 10. novaluron
 - 11. noviflumuron
 - 12. penfluron
 - 13. teflubenzuron
 - 14. triflumuron
 - B. juvenile hormone mimics
 - 1. epofenonane
 - 2. fenoxycarb
 - 3. hydroprene
 - 4. kinoprene
 - 5. methoprene
 - 6. pyriproxyfen
 - 7. triprene
 - C. juvenile hormones
 - 1. juvenile hormone I
 - 2. juvenile hormone II
 - 3. juvenile hormone III
 - D. moulting hormone agonists
 - 1. chromafenozide
 - 2. halofenozide
 - 3. methoxyfenozide
 - 4. tebufenozide
 - E. moulting hormones
 - 1. .alpha.-ecdysone
 - 2. ecdysterone
 - F. moulting inhibitors
 - 3. diofenolan
 - G. precocenes
 - 1. precocene I
 - 2. precocene II
 - 3. precocene III
 - H. dicyclanil

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	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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